

The Responder

“Progress Saves Lives...”

Edition 71 | September 2024

From the Editor's Desk

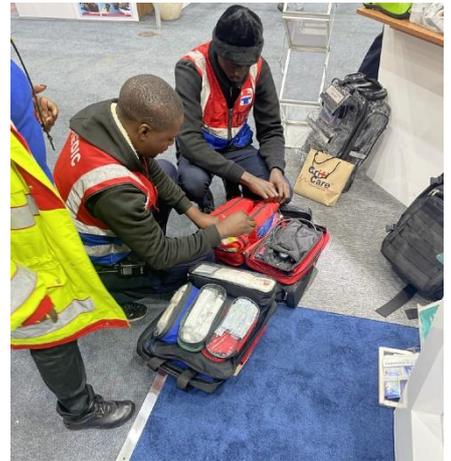
Greetings friends, clients, and fellow healthcare professionals, welcome to the September edition of The Responder.

Happy Spring to you all. It somehow feels like Winter was that much longer this year. It is likely on account of the crazy rain we had, and of course the excessive cold this year. When last did we see snow on Table Mountain? Prior to this Winter, I cannot recall ever seeing snow on Table Mountain.

Our new EMS shears are now in stock. These are the one's that were in our August article in The Responder. We believe they are going to be an extremely popular product and so if you have not purchased yours, it would be a good time to visit our online store at www.be-safe.co.za and grab one before they are all gone.



We are really excited to announce that we are currently exhibiting at the Medic East Africa Medical Tradeshow, which is being held in Nairobi, Kenya from the 4 – 6 September 2024. We are being represented by our Johannesburg branch manager, Quinton Matheson. This is a very exciting opportunity for our company because it allows us to potentially expand our reach into other areas in Africa and also exposes new potential clients to our very wide range of products. The feedback from visitors from day one, is really exciting and there has already been a lot of interest in our EMS range of products. We are truly grateful to the Department of Trade and Industry and Competition (DTIC) who made the funding available for our attendance. We would also like to say a huge thank you to the Medical Device Manufacturers of South Africa Associating (MDMSA), who facilitated the applications and arrangements. Be Safe Paramedical have been members of MDMSA for the past couple of years and they are an outstanding association to belong to.



In this edition of The Responder, our article will focus on Open Pneumothorax, its recognition and treatment. You will be particularly interested in our use of our new PneumoPatch™ Chest wound Seal as a very effective way to seal open chest wounds. Our PneumoPatch™ V is on special in this edition. This is a good opportunity to start using it and to see what an effective option it is.

As always, we have some great specials lined up for you, so you will definitely want to check them out for some great savings.

With that said, we hope you enjoy this edition of The Responder.

Yours in Healthcare

Gravin Sutton



The Responder

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Healthcare Article

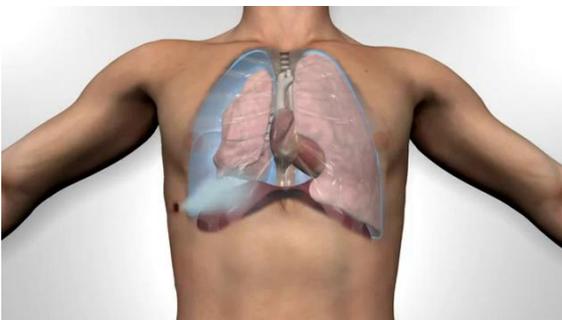
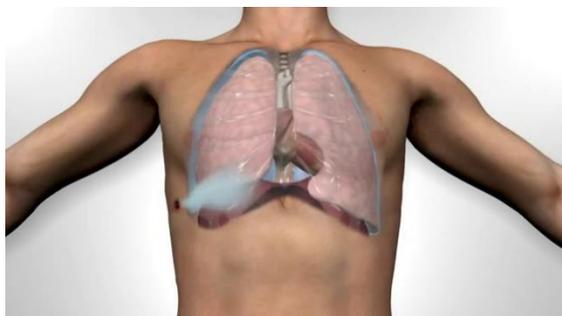
Open Pneumothorax – Recognition, Treatment and Complications

Introduction

Open pneumothorax (or sucking chest wound) can be devastating when not recognised and treated appropriately. The chest cavity needs to be intact in order for ventilation to be effective. As such, standard field care focusses on sealing the chest wound with an occlusive dressing.

This article is aimed at the basics (as I have been accused of sometimes providing too much depth to our articles), because in essence, the basics is what saves lives... Agree? I say this based on experience and not through knowledge gained from textbooks.

For our basic providers, you don't need to be swamped with piles of equipment and 20 reference books to make a difference. It is better to be armed with knowledge that can be converted into a practical skill. Reciting 100 references is not going to save the patient. Only doing saves lives... So even if you practise basic care... do it... but most importantly, do it well...



Definition of Open Pneumothorax

Open pneumothorax occurs when penetrating trauma causes a break in the integrity of the chest wall. If the hole in the chest wall is greater than $\frac{2}{3}$ the diameter of the trachea, air will preferentially enter through the hole in the chest cavity during inspiration.

This occurs because the hole in the chest wall is far shorter than the trachea and therefore offers less resistance to flow.

This results in a collapsed lung, inadequate ventilation and oxygenation and a progressive build-up of air in the affected pleural space.

In the event that the hole in the chest cavity has a flap associated with it, the open pneumothorax may lead to a tension pneumothorax requiring needle thoracostomy.

Diagnosis

A clinical diagnosis should be made during the primary survey. During visual inspection of the chest, a wound may be seen that appears to be 'sucking' air (sometimes audible) into the chest cavity during inspiration and may produce bubbling blood during exhalation.

In addition to this, the patient may have rapid, shallow and laboured respirations which usually become

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progressively worse as lung expansion decreases in the affected hemithorax. Patients who are hypoxic can be extremely combative. This is often misinterpreted as a ‘difficult’ patient and the results of this oversight will be disastrous for the patient. Furthermore, poor air entry will be detected in the affected hemithorax during auscultation and hyperresonance likely on percussion.

Emergency Care

Provide the patient with high flow oxygen via a face mask.

Perform a thorough chest exam. Look, listen and feel.



Control any visible external bleeding by direct pressure. Most bleeding will likely occur into the chest cavity. For this reason, it is near impossible to determine the severity of the injury based on visible external blood loss. Rather use the mechanism of injury and the potential energy transferred to guide you in assessing potential severity.

Apply a non-porous occlusive dressing over the wound (such as plastic, or foil from space blanket) and tape it down on 3 sides.

Ensure that the patient is monitored very carefully as there is a potential that the open side of the 3-sided tape may stick to the chest wall and be ineffective.

Using the PneumoPatch™ to seal the chest wound



PneumoPatch™ V is an occlusive chest wound dressing developed and manufactured by Be Safe Paramedical specifically for the treatment of open pneumothorax. It consists of a non-porous pad with a gel adhesive backing that promotes excellent chest wall adhesion. Incorporated into the pad is a one-way valve system that allows venting of the chest cavity during expiration and stops air from being drawn into the chest cavity during inspiration.

Simply remove the PneumoPatch™ from its foil packaging. Use the 100x100 trauma pad (included in the pack) to wipe away excess blood or fluid from the chest wall. Peel off the protective backing. Centre the one-way valve directly over the hole in the chest and apply firm downward pressure to secure the PneumoPatch™ in place. Continuously monitor the patient for improvement.

For those that prefer a non-vented chest wound seal, we have also recently launched the PneumoPatch™ NV, which has the same design as the PneumoPatch™ V, but excludes a valve. In addition, the non-vented version has a clear window in the centre of the dressing, which helps you line up the chest wound seal during placement



The Responder

“Progress Saves Lives...”

Edition 71 | September 2024

PneumoPatch™ is the most cost-effective purpose designed chest wound seal on the South African market. It is extremely easy and effective to use and is therefore suitable for use by all levels of emergency care providers.

Challenges in care

One of the major challenges in caring for an open pneumothorax is the technique used to seal the chest wound. In my experience, a good seal and one-way valve effect can only be achieved with good quality disposables. Have you ever tried to get paper tape to stick to a shocked patient's chest? It just does not work. Most commercial tapes used by Emergency Services are bought in bulk, with a major focus on quantity and cost rather than quality. When these tapes are used under normal circumstances, they provide adequate adhesion. When used on patients who are severely compromised and shocked, they dramatically lose their efficacy. The key is therefore to have a roll of good quality tape available at all times. Save it for special circumstances so to speak.

Another challenge is finding the correct material to provide a non-porous seal. Regular gauze and trauma pads are too porous and thus not really suitable for use as an occlusive dressing. I have seen emergency care providers use the plastic packaging of gauze pads, cut up rescue blankets and even a piece of a surgical glove to try and get a good seal. Yes, they will all work (to some degree); however, they can be a challenge to tape in place.

My personal opinion is... splash out a few Rand and kit your jump bags with a couple of PneumoPatch™ Chest Wound Seals and ensure that you have the correct tools to effectively care for the next open pneumothorax you treat.

Our PneumoPatch™ V and PneumoPatch™ NV are available for order now. These new generation chest wound seals will be replacing our previous CriteSeal Chest Wound Seal, which will be completely phased out when stock has been depleted. If you would like to find out more about our PneumoPatch™, please feel free to drop us a mail at info@be-safe.co.za

The Responder

“Progress Saves Lives...”

Edition 71 | September 2024

Specials

CritiCare® PneumoPatch™ Vented Chest Wound Seal

Product Code: REF:CHEST.WS.PP.V



R148.50 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

[Buy Now](#)

Criticare® Econo Bag Red

Product Code: REF:BAG.ECO.R



R97.75 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

[Buy Now](#)

Criticare® ResponderPAC EMS Jump Bag

Product Code: REF:BAG.RP.CC



R1 441.10 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

[Buy Now](#)

CritiCare® PhysioPAC Bag Black

Product Code: REF:BAG.PHP.CC.BLK



R230.00 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

[Buy Now](#)

The Responder

“Progress Saves Lives...”

Edition 71 | September 2024

BP Palm Aneroid Multi – 5 Cuff Set

Product Code: BPM.P.M5C.WB



R335.00 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

[Buy Now](#)

CritiCare® Quest First Aid Bag (No Contents)

Product Code: REF:BAG.QST.CC



R86.25 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

[Buy Now](#)

CritiCare® Grabber Bag (Empty)

Product Code: REF:BAG.GB.CC



R414.20 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

[Buy Now](#)

Criticare® O2PAC Oxygen Cylinder Bag (Black)

Product Code: REF:BAG.O2PAC.CC.BLK



R699.48 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

[Buy Now](#)

The Responder

“Progress Saves Lives...”

Edition 71 | September 2024

CritiCare® DrugPAC Medication Bag

Product Code: REF:BAG.DRUGPAC.CC



R1052.25 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

[Buy Now](#)

CritiCare® Cardiology Stethoscope

Product Code: STETH.CARDIO



R380.00 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

[Buy Now](#)

CritiCare® Rappaport Burgandy Stethoscope

Product Code: STETH.RAPP.BUR



R118.19 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

[Buy Now](#)

CritiCare® CritiBand MkII Trauma Bandage

Product Code: B.Crit.H.100



R140.50 Inclusive of Vat each

Offer valid until 30 September 2024 or while stocks last

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